

1 **ABSTRACT**

2 A portion of an audio signal is separated into multiple frames from which
3 one or more different features are extracted. These different features are used, in
4 combination with a set of rules, to classify the portion of the audio signal into one
5 of multiple different classifications (for example, speech, non-speech, music,
6 environment sound, silence, etc.). In one embodiment, these different features
7 include one or more of line spectrum pairs (LSPs), a noise frame ratio, periodicity
8 of particular bands, spectrum flux features, and energy distribution in one or more
9 of the bands. The line spectrum pairs are also optionally used to segment the
10 audio signal, identifying audio classification changes as well as speaker changes
11 when the audio signal is speech.
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